

No.

200000297



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

DEKALB Genetics Corporation

Whereas, THERE HAS BEEN PRESENTED TO THE

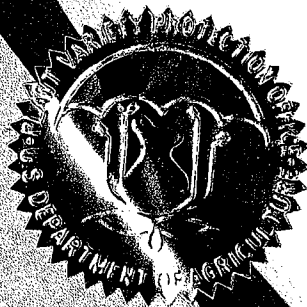
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN, FIELD

'94INK1A'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this eighteenth day of April, in the year two thousand two.

Attest:

Paul M. Ziskind

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Gregory A. Gorman

Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICEAPPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER <div style="text-align: center;">DEKALB Genetics Corporation</div>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME		3. VARIETY NAME <div style="text-align: center;">94INK1A</div>	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) <div style="text-align: center;">3100 Sycamore Road DeKalb, IL 60115</div>		5. TELEPHONE (include area code) <div style="text-align: center;">(815) 758-9281</div>		<div style="border: 1px solid black; padding: 2px;">FOR OFFICIAL USE ONLY</div> PVPO NUMBER <div style="text-align: center; font-size: 1.2em;">0002977</div>	
6. FAX (include area code) <div style="text-align: center;">(815) 758-3117</div>		7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) <div style="text-align: center;">Corporation</div>		8. IF INCORPORATED, GIVE STATE OF INCORPORATION <div style="text-align: center;">Delaware</div>	
9. DATE OF INCORPORATION <div style="text-align: center;">June 15, 1988</div>		10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Timothy R. Kain DEKALB Genetics Corporation 3100 Sycamore Road DeKalb, IL 60115 </div> <div style="width: 45%;"> Donald Traut DEKALB Genetics Corporation 3100 Sycamore Road DeKalb, IL 60115 </div> </div>		<div style="border: 1px solid black; padding: 5px;"> FILING AND EXAMINATION FEES: <div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 0.8em; margin-right: 5px;">UNITED STATES DEPARTMENT OF AGRICULTURE</div> <div style="margin-left: 10px;"> \$ 2450⁰⁰ DATE 6-8-02 CERTIFICATION FEE: \$ 320.00 DATE 3/25/02 </div> </div> </div>	
11. TELEPHONE (Include area code) <div style="text-align: center;">(815) 758-9281</div>		12. FAX (Include area code) <div style="text-align: center;">(815) 758-3117</div>		13. E_MAIL <div style="text-align: center;">tkain@dekalb.com</div>	
14. CROP KIND (Common Name) <div style="text-align: center;">Corn</div>		15. GENUS AND SPECIES NAME OF CROP <div style="text-align: center;">Zea mays</div>		16. FAMILY NAME (Botanical) <div style="text-align: center;">Gramineae</div>	
17. IS THE VARIETY A FIRST GENERATION HYBRID? <div style="display: flex; justify-content: space-around;"> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO </div>		18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office) </div> <div style="width: 50%;"> 19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input checked="" type="checkbox"/> NO (If "no," go to item 22) </div> </div> </div>			
20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> YES <input type="checkbox"/> NO </div>		21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <div style="display: flex; justify-content: space-around;"> <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED </div>			
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <div style="display: flex; justify-content: space-between;"> <input checked="" type="checkbox"/> YES U.S. February 2000 <input type="checkbox"/> NO </div> IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO </div> IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)			
24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.					
SIGNATURE OF OWNER <div style="text-align: center; font-size: 1.2em;">Timothy R. Kain</div>			SIGNATURE OF OWNER 		
NAME (Please print or type) <div style="text-align: center;">Timothy R. Kain</div>			NAME (Please print or type) 		
CAPACITY OR TITLE <div style="text-align: center;">Patent Scientist</div>		DATE <div style="text-align: center; font-size: 1.2em;">6/6/00</div>		CAPACITY OR TITLE 	
DATE 		DATE 			

INSTRUCTIONS

Page 2 - 94INK1A

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,450 (\$300 filing fee and \$2,150 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$300 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvp.htm>

ITEM

- 18a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) evidence of uniformity and stability; and (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
19. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

A hybrid produced from this variety was first sold in the United States - February 2000

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter. Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-2791. To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDD). USDA is an equal opportunity employer.

S&T-470 (6-98) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (03-96) which is obsolete.

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EXHIBIT A

Origin and Breeding History
94INK1A

94INK1A was selected for earliness, improved grain quality, ear size and greater combining ability.

Summer 1992	The inbred line 3IIH6 (a proprietary DEKALB Genetics Corporation inbred) was crossed to the inbred line 94KBZ1 (a proprietary DEKALB Genetics Corporation inbred) in nursery rows G92: 1-2 and G92:3-12.
Winter 1992-93	The S0 seed was grown and self-pollinated in nursery row C92:1936.
Summer 1993	The S1 seed was grown and self-pollinated in nursery rows G93:19-98 through 19-100 and 20-100 through 20-54. Thirty-three ears were selected.
Summer 1994	S2 ears were grown ear-to-row and self-pollinated. Two ears were selected in nursery row G94:59-71.
Summer 1995	S3 ears were grown ear-to-row and self-pollinated. Three ears were selected in nursery row G95:64-65.
Summer 1996	S4 ears were grown ear-to-row and self-pollinated. Four ears were selected in nursery row G96:401-78.
Summer 1997	S5 ears were grown ear-to-row and self-pollinated. Two ears from nursery row G97:502-70 were selected and designated as coded inbred 94INK1A.
Winter 1997-98	S6 ears were grown ear-to-row and self-pollinated. Twenty ears from nursery rows H97 11Y:3-23 through 3-26 were selected.
Summer 1998	S7 ears were grown ear-to-row and self-pollinated. Fifteen ears were selected from nursery row G98:35-83 through 35-89.
Winter 1998-99	S8 ears were grown ear-to-row and self-pollinated. Final selection was completed in nursery rows PR98:7-1 through 7-17. This selected consisted of bulking S9 ears.

Statement of Stability and Uniformity

Corn inbred 94INK1A was coded in 1997 with final selection made in the Winter of 1998-99 and has been reproduced by self pollination for two years and judged to be stable. Inbred 94INK1A is uniform for all traits observed.

Statement of Variants

94INK1A shows no variants other than what would normally be expected due to environment or that would occur for almost any character during the course of repeated sexual reproduction.

EXHIBIT BStatement of Distinctness

DEKALB Genetics Corporation believes that 94INK1A is most similar to corn inbred 3IIH6, an inbred developed by DEKALB Genetics Corporation.

94INK1A and 3IIH6 differ most significantly in the following traits:

Qualitative Traits:

Trait	94INK1A	3IIH6
Anther Color	Green-Yellow 2.5 GY 8/6	Red 2.5 R 5/8
Silk Color	Pink 2.5 R 7/6	Red 2.5 R 5/8
Kernel Row Direction	Straight	Curved

OBJECTIVE DESCRIPTION OF VARIETY
CORN (*Zea mays* L.)

Name of Applicant(s) DEKALB Genetics Corporation		Variety Seed Source	Variety Name or Temporary Designation 94INK1A																																														
Address (Street & No., or R.F.D. No., City, State, Zip Code and Country) 3100 Sycamore Road, DeKalb, IL 60115 U.S.A.			FOR OFFICIAL USE																																														
			PVPO Number 2000 0 0297																																														
Place the appropriate number that describes the varietal characters typical of this inbred variety in the spaces below. Right justify whole numbers by adding leading zeroes if necessary. Completeness should be striven for to establish an adequate variety description. Traits designated by a '*' are considered necessary for an adequate variety description and must be completed.																																																	
COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices; describe #25 and #26 in Comments section): <table border="0"> <tr> <td>01=Light Green</td> <td>06=Pale Yellow</td> <td>11=Pink</td> <td>16=Pale Purple</td> <td>21=Buff</td> </tr> <tr> <td>02=Medium Green</td> <td>07=Yellow</td> <td>12=Light Red</td> <td>17=Purple</td> <td>22=Tan</td> </tr> <tr> <td>03=Dark Green</td> <td>08=Yellow-Orange</td> <td>13=Cherry Red</td> <td>18=Colorless</td> <td>23=Brown</td> </tr> <tr> <td>04=Very Dark Green</td> <td>09=Salmon</td> <td>14=Red</td> <td>19=White</td> <td>24=Bronze</td> </tr> <tr> <td>05=Green-Yellow</td> <td>10=Pink-Orange</td> <td>15=Red & White</td> <td>20=White Capped</td> <td>25=Variegated (Describe)</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>26=Other (Describe)</td> </tr> </table>					01=Light Green	06=Pale Yellow	11=Pink	16=Pale Purple	21=Buff	02=Medium Green	07=Yellow	12=Light Red	17=Purple	22=Tan	03=Dark Green	08=Yellow-Orange	13=Cherry Red	18=Colorless	23=Brown	04=Very Dark Green	09=Salmon	14=Red	19=White	24=Bronze	05=Green-Yellow	10=Pink-Orange	15=Red & White	20=White Capped	25=Variegated (Describe)					26=Other (Describe)															
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STANDARD INBRED CHOICES (Use the most similar (in background and maturity) of these to make comparisons based on grow-out trial data): <table border="0"> <tr> <td colspan="2">Yellow Dent Families:</td> <td>Yellow Dent (Unrelated):</td> <td colspan="2">Sweet Corn:</td> </tr> <tr> <td>Family</td> <td>Members</td> <td></td> <td colspan="2"></td> </tr> <tr> <td>B14</td> <td>CM105, A632, B64, B68</td> <td>Col09, ND246,</td> <td colspan="2">C13, Iowa5125, P39, 2132</td> </tr> <tr> <td>B37</td> <td>B37, B76, H84</td> <td>Oh7, T232</td> <td colspan="2"></td> </tr> <tr> <td>B73</td> <td>N192, A679, B73, NC268</td> <td>W117, W153R</td> <td colspan="2">Popcorn:</td> </tr> <tr> <td>C103</td> <td>Mo17, Va102, Va35, A682</td> <td>W182BN</td> <td colspan="2">SG1533, 4722, HP301, HP7211</td> </tr> <tr> <td>Oh43</td> <td>A619, MS71, H99, Va26</td> <td></td> <td colspan="2"></td> </tr> <tr> <td>WF9</td> <td>W64A, A554, A654, Pa91</td> <td>White Dent:</td> <td colspan="2">Pipecorn:</td> </tr> <tr> <td></td> <td></td> <td>CI66, H105, Ky228</td> <td colspan="2">Mo15W, Mo16W, Mo24W</td> </tr> </table>					Yellow Dent Families:		Yellow Dent (Unrelated):	Sweet Corn:		Family	Members				B14	CM105, A632, B64, B68	Col09, ND246,	C13, Iowa5125, P39, 2132		B37	B37, B76, H84	Oh7, T232			B73	N192, A679, B73, NC268	W117, W153R	Popcorn:		C103	Mo17, Va102, Va35, A682	W182BN	SG1533, 4722, HP301, HP7211		Oh43	A619, MS71, H99, Va26				WF9	W64A, A554, A654, Pa91	White Dent:	Pipecorn:				CI66, H105, Ky228	Mo15W, Mo16W, Mo24W	
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1. TYPE: (describe intermediate types in Comments section) * 2 1=Sweet 2=Dent 3=Flint 4=Flour 5=Pop 6=Ornamental 7=Pipecorn			Standard Inbred Name B37 2																																														
2. REGION WHERE DEVELOPED IN THE U.S.A.: * 2 1=Northwest 2=Northcentral 3=Northeast 4=Southeast 5=Southcentral 6=Southwest 7=Other			Standard Seed Source NCRIPS 2																																														
3. MATURITY (In Region Best Adaptability; show Heat Unit formula in "Comments" section): <table border="0"> <tr> <td></td> <td>DAYS</td> <td>HEAT UNITS</td> </tr> <tr> <td>* 0 6 5</td> <td>1 2 9 2.0</td> <td>From emergence to 50% of plants in silk</td> </tr> <tr> <td>* 0 6 8</td> <td>1 3 6 1.0</td> <td>From emergence to 50% of plants in pollen</td> </tr> <tr> <td>- - -</td> <td>- - - .</td> <td>From 10% to 90% pollen shed</td> </tr> <tr> <td>(*) - - -</td> <td>- - - .</td> <td>From 50% silk to optimum edible quality</td> </tr> <tr> <td>- - -</td> <td>- - - .</td> <td>From 50% silk to harvest at 25% moisture</td> </tr> </table>				DAYS	HEAT UNITS	* 0 6 5	1 2 9 2.0	From emergence to 50% of plants in silk	* 0 6 8	1 3 6 1.0	From emergence to 50% of plants in pollen	- - -	- - - .	From 10% to 90% pollen shed	(*) - - -	- - - .	From 50% silk to optimum edible quality	- - -	- - - .	From 50% silk to harvest at 25% moisture	<table border="0"> <tr> <td>DAYS</td> <td>HEAT UNITS</td> </tr> <tr> <td>0 8 3</td> <td>1 6 7 1.0</td> </tr> <tr> <td>0 7 6</td> <td>1 5 3 3.0</td> </tr> <tr> <td>- - -</td> <td>- - - .</td> </tr> <tr> <td>- - -</td> <td>- - - .</td> </tr> <tr> <td>0 6 2</td> <td>1 1 2 2.0</td> </tr> </table>		DAYS	HEAT UNITS	0 8 3	1 6 7 1.0	0 7 6	1 5 3 3.0	- - -	- - - .	- - -	- - - .	0 6 2	1 1 2 2.0															
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Application Variety Data			Page 2	Standard Inbred Data				
5. LEAF:			Standard Deviation	Sample Size	Standard Deviation			Sample Size
*	0 0	9. 1 cm Width of Ear Node Leaf	0.8	40	0 0	9. 7	0.757	150
*	0 6	8. 4 cm Length of Ear Node Leaf	2.2	40	0 7	0. 8	4.158	150
*		5. 6 Number of leaves above top ear	0.7	20	6. 0		0.588	75
	3 4	5 degrees Leaf Angle (measure from 2nd leaf above ear at anthesis to stalk above leaf)	7.3	40	3 2	0	7.092	150
*	0 2	Leaf Color (Munsell code 5 GY 4/8)			0 2	(Munsell code 5 GY 4/8)		
		2 Leaf Sheath Pubescence(Rate on scale from 1=none to 9=peach fuzz)			2			
		2 Marginal Waves (Rate on scale from 1=none to 9=many)			6			
		6 Longitudinal Creases (Rate on scale from 1=none to 9=many)			1			
6. TASSEL:			Standard Deviation	Sample Size	Standard Deviation			Sample Size
*	5. 0	Number of Primary Lateral Branches	0.9	40	8. 5		1.147	150
	3 7	5 Branch Angle from Central Spike	2.8	40	3 7	2	4.850	150
*	3 8	5 cm Tassel Length (from top leaf collar to tassel tip)	4.3	40	3 4	2	3.288	150
	3. 7	Pollen Shed (Rate on scale from 0=male sterile to 9=heavy shed)			7. 0			
	0 5	Anther Color (Munsell code 2.5 GY 8/6)			1 4	(Munsell code 5 R 5/8)		
	0 2	Glume Color (Munsell code 5 GY 4/8)			0 2	(Munsell code 5 GY 4/8)		
		1 Bar Glumes (Glume Bands): 1=Absent 2=Present			1			
7a. EAR (Unhusked Data):					0 5 (Munsell code 2.5 GY 8/6)			
*	1 1	Silk Color (3 days after emergence) (Munsell code 2.5 R 7/6)			0 2	(Munsell code 5 GY 4/8)		
	0 2	Fresh Husk Color (25 days after 50% silking) (Munsell code 5 GY 4/8)			2 1	(Munsell code 2.5 Y 8/4)		
	2 1	Dry Husk Color (65 days after 50% Silking) (Munsell code 2.5 Y 8/4)			1			
*	3	Position of Ear at Dry Husk Stage: 1=Upright 2=Horizontal 3=Pendent			6			
	1	Husk Tightness (Rate on scale from 1=very loose to 9=very tight)			2			
	1	Husk Extension (at harvest): 1=Short (ears exposed) 2=Medium (<8 cm) 3=Long (8-10 cm beyond ear tip) 4=Very Long (>10 cm)						
7b. EAR (Husked Ear Data):			Standard Deviation	Sample Size	Standard Deviation			Sample Size
*	1 4	1 cm Ear Length	0.8	20	1 3	3	1.787	65
*	3 7	0 mm Ear Diameter at mid-point	1.6	20	3 3	7	4.158	65
	0 5	7. 8 gm Ear Weight	18.3	40	0 6	4. 2	36.888	130
*	1 5	Number of Kernel Rows	2.4	20	1 3		2.506	65
		2 Kernel Rows: 1=Indistinct 2=Distinct			2			
		1 Row Alignment: 1=Straight 2=Slightly Curved 3=Spiral			2			
	1 3	1 cm Shank Length	1.7	40	0 7	3	1.074	130
		2 Ear Taper: 1=Slight 2=Average 3=Extreme			2			
Application Variety Data					Standard Inbred Data			
Note: Use chart on first page to choose color codes for color traits.								

Application Variety Data			Page 3		Standard Inbred Data		
8. KERNEL (Dried):			Standard Deviation	Sample Size	Standard Deviation Sample Size		
0	9. 8 mm Kernel Length	0.6	20	0	8. 5	0.917	65
0	9. 4 mm Kernel Width	0.6	20	0	7. 4	0.558	65
0	4. 0 mm Kernel Thickness	0.7	20	0	5. 4	0.756	65
2	6. 8 % Round Kernels (Shape Grade)		500g	5	5. 0		500g
1 Aleurone Color Pattern: 1=Homozygous 2=Segregating					1		
(*)	1 9 Aleurone Color (Munsell code Lighter than 2.5 Y 9/2)			1	9 (Munsell code Lighter Than 2.5 Y 9/2)		
*	0 7 Hard Endosperm Color (Munsell code 2.5 Y 8/10)			0	7 (Munsell code 2.5 Y 8/10)		
*	0 3 Endosperm Type: 1=Sweet (su1) 2=Extra Sweet (sh2) 3=Normal Starch 4=High Amylose Starch 5=Waxy Starch 6=High Protein 7=High Lysine 8=Super Sweet (se) 9=High Oil 10=Other			0	3		
2	5. 9 gm Weight per 100 Kernels (unsized sample)	4.7	400 seeds	2	5. 1	3.698	1300 seeds
9. COB:			Standard Deviation	Sample Size	Standard Deviation Sample Size		
*	2 2. 0 mm Cob Diameter at mid-point	1.9	20	2	1. 2	2.378	65
	1 4 Cob Color (Munsell code 5 R 3/8)			1	1 (Munsell code 5 R 6/6)		
10. DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested; leave Race or Strain Options blank if polygenic):							
A. Leaf Blights, Wilts, and Local Infection Diseases							
6 Anthracnose Leaf Blight (<i>Colletotrichum graminicola</i>)				7			
Common Rust (<i>Puccinia sorghi</i>)				-			
Common Smut (<i>Ustilago maydis</i>)				6			
7 Eyespot (<i>Kabatella zeae</i>)				-			
6 Goss's Wilt (<i>Clavibacter michiganense</i> spp. <i>nebraskense</i>)				-			
4 Gray Leaf Spot (<i>Cercospora zeae-maydis</i>)				-			
7 Helminthosporium Leaf Spot (<i>Bipolaris zeicola</i>) Race _____				Race _____			
6 Northern Leaf Blight (<i>Exserohilum turcicum</i>) Race 2 _____				3 Race 1 _____			
7 Southern Leaf Blight (<i>Bipolaris maydis</i>) Race 0 _____				7 Race 0 _____			
Southern Rust (<i>Puccinia polysora</i>)				7			
4 Stewart's Wilt (<i>Erwinia stewartii</i>)				-			
Other (Specify) _____				-			
B. Systemic Diseases							
2 Corn Lethal Necrosis (MCMV and MDMV)				1			
Head Smut (<i>Sphacelotheca reiliana</i>)				-			
Maize Chlorotic Dwarf Virus (MCDV)				-			
Maize Chlorotic Mottle Virus (MCMV)				-			
Maize Dwarf Mosaic Virus (MDMV) Strain _____				Strain _____			
Sorghum Downy Mildew of Corn (<i>Peronosclerospora sorghi</i>)				-			
Other (Specify) _____				-			
C. Stalk Rots							
Anthracnose Stalk Rot (<i>Colletotrichum graminicola</i>)				-			
Diplodia Stalk Rot (<i>Stenocarpella maydis</i>)				-			
Fusarium Stalk Rot (<i>Fusarium moniliforme</i>)				-			
Gibberella Stalk Rot (<i>Gibberella zeae</i>)				-			
Other (Specify) _____				-			
D. Ear and Kernel Rots							
Aspergillus Ear and Kernel Rot (<i>Aspergillus flavus</i>)				-			
Diplodia Ear Rot (<i>Stenocarpella maydis</i>)				-			
Fusarium Ear and Kernel Rot (<i>Fusarium moniliforme</i>)				-			
Gibberella Ear Rot (<i>Gibberella zeae</i>)				-			
Other (Specify) _____				-			
Application Variety Data					Standard Inbred Data		
Note: Use chart on first page to choose color codes for color traits.							

Application Variety Data			Page 4	Standard Inbred Data		
11. INSECT RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested):						
	Standard Deviation	Sample Size		Standard Deviation	Sample Size	
- Banks Grass Mite (<i>Oligonychus pratensis</i>)			-			
- Corn Earworm (<i>Helicoverpa zea</i>)			-			
- Leaf-Feeding			-			
- Silk Feeding :			-			
- Ear Damage			-			
- Corn Leaf Aphid (<i>Rhopalosiphum maidis</i>)			-			
- Corn Sap Beetle (<i>Carpophilus dimidiatus</i>)			-			
- European Corn Borer (<i>Ostrinia nubilalis</i>)			-			
- 1st Generation (Typically Whorl Leaf Feeding)			-			
- 2nd Generation (Typically Leaf Sheath-Collar Feeding)			-			
- Stalk Tunneling :			-			
- cm tunneled/plant			-			
- Fall Armyworm (<i>Spodoptera frugiperda</i>)			-			
- Leaf-Feeding			-			
- Silk-Feeding :			-			
- mg larval wt.			-			
- Maize Weevil (<i>Sitophilus zeamais</i>)			-			
- Northern Rootworm (<i>Diabrotica barberi</i>)			-			
- Southern Rootworm (<i>Diabrotica undecimpunctata</i>)			-			
- Southwestern Corn Borer (<i>Diatraea grandiosella</i>)			-			
- Leaf Feeding			-			
- Stalk Tunneling :			-			
- cm tunneled/plant			-			
- Two-spotted Spider Mite (<i>Tetranychus urticae</i>)			-			
- Western Rootworm (<i>Diabrotica virgifera virgifera</i>)			-			
- Other (Specify)			-			
12. AGRONOMIC TRAITS:						
4 Stay Green (at 65 days after anthesis) (Rate on a scale from 1=worst to 9=excellent.)				4		
0 0. 0 % Dropped Ears (at 65 days after anthesis)				0 0. 0		
0 0. 0 % Pre-anthesis Brittle Snapping				0 0. 0		
0 0. 0 % Pre-anthesis Root Lodging				0 5. 4		
0 5. 9 % Post-anthesis Root Lodging (at 65 days after anthesis)				0 3. 0		
3 6 0 2. 8 Kg/ha Yield of Inbred Per Se (at 12-13% grain moisture)				2 1 9 6. 9		
13. MOLECULAR MARKERS: (0=data unavailable; 1=data available but not supplied; 2=data supplied)						
1 Isozymes	1 RFLP's	0 RAPD's				
REFERENCES:						
<p>Butler, D.R. 1954. A System for the Classification of Corn Inbred Lines. PhD Thesis, Ohio State University.</p> <p>Emerson, R.A., G.W. Beadle, and A.C. Fraser. 1935. A Summary of Linkage Studies in Maize. Cornell A.E.S., Mem. 180.</p> <p>Farr, D.F., G.F. Bills, G.P. Chamuris, A.Y. Rossman. 1989. Fungi on Plant and Plant Products in the United States. The American Phytopathological Society, St. Paul, MN.</p> <p>Inglett, G.E. (Ed.) 1970. Corn: Culture, Processing, Products. Avi Publishing Company, Westport, CT.</p> <p>Jugenheimer, R.W. 1976. Corn: Improvement, Seed Production, and Uses. John Wiley & Sons, New York.</p> <p>McGee, D.C. 1988. Maize Diseases. APS Press, St. Paul, MN. 150 pp.</p> <p>Munsell Color Chart for Plant Tissues. Macbeth. P.O. Box 230. Newburgh, N.Y. 12551-0230</p> <p>The Mutants of Maize. 1968. Crop Science Society of America. Madison, WI.</p> <p>Shurtleff, M.C. 1980. Compendium of Corn Diseases. APS Press, St. Paul, MN. 105 pp.</p> <p>Sprague, G.F., and J.W. Dudley (Editors). 1988. Corn and Corn Improvement, Third Edition. Agronomy Monograph 18. ASA, CSSA, SSSA, Madison, WI.</p> <p>Stringfield, G.H. Maize Inbred Lines of Ohio. Ohio A.E.S., Bul. 831. 1959.</p> <p>U.S. Department of Agriculture. 1936, 1937. Yearbook.</p>						
COMMENTS (eg. state how heat units were calculated, standard inbred seed source, and/or where data was collected. Continue in Exhibit D):						
Heat Unit Calculation: $GDU = \frac{\text{Daily Max Temp } (<=86^{\circ}\text{F}) + \text{Daily Min Temp } (>=50^{\circ}\text{F})}{2} - 50^{\circ}\text{F}$						

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

EXHIBIT E

STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S) DEKALB Genetics Corporation	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME 94INK1A
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 3100 Sycamore Road DeKalb, IL 60115 U.S.A.	5. TELEPHONE (include area code) (815) 758-9281	6. FAX (include area code) (815) 758-3117
7. PVPO NUMBER 0000002071		
8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		

9. Is the applicant (individual or company) a U.S. national or U.S. based company?

☒ YES☐ NO

If no, give name of country

10. Is the applicant the original owner?

☒ YES☐ NOIf no, please answer one of the following:

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?

☐ YES☐ NO

If no, give name of country

b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company?

☐ YES☐ NO

If no, give name of country

11. Additional explanation on ownership (if needed, use reverse for extra space):

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

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